

**SECTION 09 72 70
PLASTIC WALLCOVERING**

PART 1 - GENERAL

1.1 DESCRIPTION

This section specifies plastic wall covering including Rigid Thermofoil (RTF) and Wall Decals.

1.2 RELATED WORK

- A. Color, pattern and type in COLOR SCHEDULE on drawing 100-GI002.
- B. High impact wall coverings: Section 10 26 00, WALL AND DOOR PROTECTION.
- C. Patient Head Wall and Foot wall panels: Section 10 25 13 PATIENT BED SERVICE WALLS AND BOOMS.

1.3 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Samples:
 - 1. Rigid Thermofoil (RTF) wall covering and vinyl wall decals, each type and pattern 300 mm (12 inch) square, each color.
- C. Manufacturer's Literature and Data:
 - 1. Primer and adhesive.
 - 2. Complete instructions for installation of wall covering.
 - 3. Maintenance instructions for each type of wall covering.
- D. Certificate: Flame spread, and smoke density factors.

1.4 QUALITY ASSURANCE

- A. Before proceeding with the work under this Section, and in coordination with other trades, finish one complete space of each type (color and pattern) of wall covering showing selected colors, textures, materials and workmanship.
- B. After approval, the sample spaces or items shall serve as a standard for similar work throughout the project.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver wall coverings, adhesive and accessories specified, to the job site in sealed, labeled containers, each bearing the manufacturer's names, brand names and color designations.
- B. Store wall covering materials laid flat, not upright, in a dry area with heat maintained at 16 °C (60 °F) minimum with humidity normal to the space or area where wall covering is to be installed.

1.6 JOB CONDITIONS

- A. Temperatures:

1. Do not start wall covering work until surfaces and materials have been maintained at 16 °C (60 °F) minimum, or higher if recommended by wall covering manufacturer, for three days before work begins.
 2. Maintain minimum temperature of 16 °C (60 °F) during the work and until primers and adhesives have fully dried or cured.
- B. Ventilation: Provide continuous ventilation as required to rid the spaces in which the wall coverings are being installed of volatile compounds given off by the wall coverings, sealers and adhesives and as recommended by the product manufacturer for full drying or curing. Use low VOC materials when available.
- C. Protect other surfaces from damage which may be caused by this work. Provide drop cloths, shields and protective equipment to prevent primers, adhesives or wall covering from fouling adjacent surfaces and in particular, storage and preparation areas.
- D. Store flammable rubbish, waste, cloths and materials which may constitute a fire hazard, in closed metal containers. Daily remove and properly dispose of flammable wastes from the site.

1.7 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extend referenced. The publications are referenced in text by the basic designation only.
- B. Federal Specifications (Fed. Spec):
A-A-1936A.....Adhesive, Contact, Neoprene Rubber
- C. National Association of Architectural Metal Manufacturers (NAAMM):
AMP 500 Series.....Metal Finishes Manual
- D. American Society for Testing and Materials (ASTM):
E84-10.....Surface Burning Characteristics of Building
Materials

PART 2 - PRODUCTS

2.1 PLASTIC WALL COVERING

- A. Rigid Thermofoil (RTF) 8-16 mil (0.008-0.016 inch) thick, up to 53" usable width, 50-250 linear yard length.
- B. Rating shall be Class B minimum (Flame spread 26-75) and smoke development rating of 0-450 when tested in accordance with ASTM E84. Installation shall meet requirements of 2012 International Building Code Chapter 8.

C. KCMA Chemical Resistance

Test Material	Results*
Vinegar	No Effect
Lemon Juice	No Effect
Grape Juice	No Effect
Orange Juice	No Effect
Tomato Ketchup	No Effect
Coffee	No Effect
Olive Oil	No Effect
Alcohol, 100 Proof	No Effect
Detergent Solution	No Effect
Mustard	Moderate Effect

* Results:

No Effect = No discoloration or stain after cleaning immediately with water.

Moderate Effect = Slight stain or discoloration apparent after cleaning.

Severe Effect = Definite stain after cleaning, remaining after 14 days.

D. Stain Resistance

(LD 3.4 2000) Test Material	Cleaning Steps 0 1 2 3 4 5 Score	Stain Resistance
Distilled Water	- - - - - 0	N
Ethyl Alcohol / Water (50:50)	- - - - - 0	N
Acetone	1 1 1 1 1 - 5	M
Household Ammonia	- - - - - 0	N
Citric Acid 10%	- - - - - 0	N
Vegetable Oil	- - - - - 0	N
Coffee	- - - - - 0	N
Tea	1 - - - - 1	N
Tomato Ketchup	1 - - - - 1	N
Mustard	1 1 - - - 2	N
10% Iodine	1 1 - - - 2	N
Black Permanent Marker	1 1 1 - - 3	N
#2 Pencil	1 - - - - 1	N
Wax Crayon	1 1 - - - 2	N
Black Shoe Polish	1 1 - - - 2	N
Total 19		

Cleaning Steps

See NEMA LD3 2000 for full description.

0 = Removed with water.

1 = 25 cycles spray cleaner or sponge.
2 = 25 cycles baking soda plus spray cleaner on brush.
3 = Acetone and cotton ball.
4 = Bleach plus cotton ball.
5 = Not Removed.
Stain Resistance
See NEMA LD3 2000 for full description.
N = No Effect.
M = Moderate Effect. Difficult to perceive stain.
S = Severe Effect. Easily perceive stain or damage to surface.

2.2 WALL DECALS

Repositionable wall covering mural and super graphic wall decals that are removable, repositionable, self-adhesive, fabric backed substrate which can be placed on any non-porous flat surface.

- A. Material: 40-45% polyester, 20-45% Pulp cellulose, 280 micron total.
Print side: Inkjet coating with low tack adhesive on back side/ .006 mil paper backing that peels off.
- B. Color: Bright White - Semi Opaque Background.
- C. Weight 7.6 oz./ lineal yard
- D. Surface Texture: Lightly Textured
- E. Size: Up to 52" panel widths
- F. Pattern: Custom. As selected from manufacturer's stock images or from custom image file.
- G. Ink: Manufacturer's standard UV protected ink with 20-year indoor fade resistance.
- H. Indoor Air Quality: Low VOC emitting
- I. Fire Retardant: Fire retardant up to 842°F (450 °C). Self-Extinguishing.
- J. Features: Phthalates-free adhesive. Formaldehyde free. Recyclable.
- K. Recyclability: Backing liner: Category 2. Material: category 5.
- L. Design Based upon "Pixercise" (www.pixersize.com). Alternate: "Murals your Way" (1-888-235-1318 www.muralsyourway.com) or approved.

2.3 PRIMER AND ADHESIVE

Mildew resistant type recommended by the wall covering manufacturer for use on substrate to receive the fabric wall covering.

PART 3 - EXECUTION

3.1 SURFACE CONDITION

1. Do not apply wall covering to rough surfaces or which have stains that will bleed through the wall covering. Fill cracks and holes and sand rough spots smooth.

2. Surfaces to receive wall covering shall be thoroughly dry. Test moisture content of plaster, concrete, and masonry walls with an electric moisture meter. The moisture shall not be more than 5 percent.
3. Prime surfaces of walls as required by manufacturer's instructions. Primer shall be completely dry before adhesive is applied.
4. Existing surfaces should be clean; free of mildew or loose or flakey paint; and, smooth before the application of primer, and adhesive.

3.2 INSTALLATION

- A. Install according to manufacturer's installation instructions. Clean up adhesive spillage with recommended cleaners. Install edge guards and wainscot cap where shown.
- B. When installation is complete, vacuum wall covering with a ceiling to floor motion.

3.3 CLEAN-UP

Upon completion of work, leave wall covering free of dirt or soil.

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